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FILE NUMBER

January 23, 1989

RECEIVED
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Federal Communications Commission
Office of the Secretary

Ms. Donna R. Searcy
Secretary
Federal Communications Commission
Room 222
1919 M Street, N.W.
Washington, D.C. 20554

Re: *MM Docket No. 87-268*

Dear Ms. Searcy:

On behalf of the Wireless Cable Association, Inc. ("WCA"), we hand you herewith an original and five copies of WCA's reply comments in response to the Tentative Decision and Further Notice of Inquiry in the referenced matter.

Should you have any questions regarding this filing, please contact the undersigned.

Very truly yours,

Paul J. Sinderbrand

Counsel to the Wireless
Cable Association, Inc.

Enclosures

cc: The Hon. Dennis R. Patrick
The Hon. James H. Quello
The Hon. Patricia Diaz Dennis
Alex D. Felker
Gerald Brock
Ralph A. Haller

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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Advanced Television Systems and their Impact on the Existing Television Broadcast Service	)	MM Docket No. 87-268
	)	
Review of Technical and Operational Requirements: Part 73-E, Television Broadcast Stations	)	
	)	
Reevaluation of the UHF Television Channel and Distance Separation Requirements of Part 73 of the Commission's Rules	)	

REPLY COMMENTS OF
THE WIRELESS CABLE ASSOCIATION, INC.

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Its Attorneys

January 23, 1989

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EXECUTIVE SUMMARY

The Wireless Cable Association, Inc. is opposed to any suggestion that the Commission reallocate to the broadcast industry any portion of the MDS, MMDS, ITFS and OFS bands on which wireless cable systems depend.

Reallocation of these bands is unnecessary to permit broadcasters to transmit ATV. Moreover, even assuming for purposes of argument that the broadcasters do need additional spectrum outside the VHF/UHF allotment, these bands cannot provide the relief the broadcasters purport to need. The MDS, MMDS, ITFS and OFS bands are extensively used by educators and wireless cable systems in the major markets where the broadcast interests claim to have the greatest need for additional spectrum, and there is no available spectrum to which these educators and wireless cable operators can practically migrate.

In addition, in reallocating spectrum to meet the needs of the broadcast and cable industries for additional point-to-point spectrum for ATV distribution, the Commission should accommodate the similar needs of the wireless cable industry.

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
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Advanced Television Systems and their Impact on the Existing Television Broadcast Service	)	MM Docket No. 87-268
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REPLY COMMENTS OF
THE WIRELESS CABLE ASSOCIATION, INC.

The Wireless Cable Association, Inc. ("WCA"), by its attorneys, hereby responds to the initial round of comments submitted in reaction to the Tentative Decision and Further Notice of Inquiry ("TD/FNOI")[1] in this proceeding.

I. INTRODUCTION

WCA is the trade association of the wireless cable industry. Its membership includes, among others, licensees, permittees and applicants for spectrum in the 2150-2162 MHz and 2500-2690 MHz super high frequency ("SHF") bands allocated to the Multipoint Distribution Service ("MDS"), Multichannel MDS ("MMDS"), Instructional Television Fixed Service ("ITFS") and

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[1] Advanced Television Systems and Their Impact on the Existing Television Broadcast Service, MM Docket No. 87-268, FCC 88-288 (released Sept. 1, 1988) [hereinafter cited as "TD/FNOI").

Private Operational Fixed Microwave Service ("OFS"). It is this SHF spectrum that a wireless cable operator employs to transmit non-broadcast cable programming services from its headend to the special reception antenna mounted on each subscriber's rooftop.

Wireless cable has begun to have a significant impact in marketplaces as large as New York, New York and as small as Salina, Kansas. When the Commission amended its rules so as to make wireless cable possible, it acted to satisfy the public demand for an additional provider of multichannel programming to compete with coaxial cable and to provide service where coaxial cable is not available.[2] While alternative multichannel services such as Direct Broadcast Satellite and "telco TV" may never become realities, today wireless cable makes available to approximately 300,000 subscribers a potpourri of cable programming services and local broadcast signals. WCA projects that by the end of 1989, the number of subscribers to wireless cable services will double. In areas served by traditional coaxial cable, wireless cable provides the only widely-available multichannel competition. In rural and urban areas unserved by coaxial cable, wireless cable offers many residents their only opportunity to view the popular programming services that had previously been available exclusively in areas served by coaxial

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[2] See Amendment of Parts 2, 21, 74 and 94 of the Commission's Rules and Regulations in Regard to Frequency Allocation to the Instructional Television Fixed Service, the Multipoint Distribution Service, and the Private Operational Fixed Microwave Service, 94 F.C.C.2d 1203, 1228 (1983).

systems.

When the Commission first authorized ITFS licensees to lease excess capacity to wireless cable operators, it anticipated that the revenues would lead to more and better ITFS programming.[3] Time has proven the Commission prescient -- the financial and operational support of educational programming that is inherent in the partnership between wireless cable operators and the educators who are ITFS licensees has led to extraordinary gains in the productive use of the ITFS band.[4]

WCA has closely monitored developments regarding Advanced Television ("ATV"), and has participated in earlier phases of this proceeding. WCA believes that the wireless cable industry is well-positioned to deliver ATV service to the

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[3] See id. at 1249-50.

[4] For example, prior to affiliating with the New York area wireless cable system, the Union Township (N.J.) Board of Education served just 10 of its own school buildings with its ITFS system. Since securing the financial and operational support of its wireless cable partner, the Board has been able to develop a consortium with fourteen other school districts in the New York metropolitan area which utilize the Board's ITFS service in their schools and aid in the programming of Union's ITFS station. The Board's ITFS activities have been cited by Governor Thomas Kean as one of the reasons the Union school district was named a model school district by the National Governors' Association. See Casey, "Making (Air)Waves at School", The Star-Ledger, at 21 (Dec. 22, 1988).

To cite another success story, the Network for Instructional TV, Inc. ("NITV") has been providing educational programming to schools via its ITFS systems in New York City, Washington and Milwaukee as a result of financial support from wireless cable and, with the growing number of wireless cable systems, services to schools have recently been, or soon will be, added in the states of Louisiana, Texas, Pennsylvania, Missouri, Florida, Georgia, Maryland, Minnesota, Michigan and Kansas.

American public, should consumer demand arise.[5] Although WCA did not file initial comments in response to the TD/FNOI, it is filing these reply comments in specific response to the unwillingness of many broadcasters to accept the Commission's tentative conclusion to refrain from reallocating spectrum above 1 GHz to the broadcast industry for ATV purposes.

Simply stated, WCA vigorously opposes any suggestion that the SHF channels utilized by wireless cable should be reallocated to the broadcast industry for ATV purposes. As will be detailed below, reallocation of the MDS, MMDS, ITFS or OFS spectrum is unnecessary to permit broadcasters to transmit ATV, would not provide broadcasters with the relief they claim to need, and could have a devastating adverse impact on the nascent wireless cable industry.

In addition, in the inquiry portion of the TD/FNOI, the Commission sought comment on the needs of the broadcast and coaxial cable industries for additional point-to-point spectrum in order to support ATV transmissions to the public. In allocating additional point-to-point spectrum to accommodate the introduction of ATV, WCA urges the Commission to also meet the

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[5] The Commission has already noted that the MDS and MMDS channels can be employed to distribute ATV. See TD/FNOI, supra note 1, at ¶¶ 38 and 78. Indeed, the same holds true for all of the SHF channels employed by wireless cable operators. Regardless of whether ATV ultimately requires bandwidths of 6 MHz, 9 MHz, 12 MHz or some other size, wireless cable operators will be able to aggregate sufficient spectrum from the thirty-three current 6 MHz MDS, MMDS, ITFS and OFS channels in the 2 GHz band.

requirements of the wireless cable industry for additional point-to-point spectrum.

II. DISCUSSION

A. The MDS, MMDS, ITFS and OFS Bands Should Not Be Reallocated For Use By Broadcasters.

In the TD/FNOI, the Commission tentatively concluded that it would not allocate spectrum outside of the existing VHF and UHF television allotment to provide for ATV transmissions by broadcasters.[6] Many of those commenting in response to the TD/FNOI strongly supported that decision.[7]

Not surprisingly, the broadcasters have generally urged the Commission to hold open the possibility of reallocating spectrum above 1 GHz.[8] Unfortunately, none of the broadcast interests commenting in response to the TD/FNOI identified with any precision the spectrum above 1 GHz they believe should be

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[6] See TD/FNOI, supra note 1, at ¶ 75.

[7] See e.g. Comments of General Instrument Corporation, MM Docket No. 87-268, at 5 (filed Nov. 30, 1988); Comments of Hughes Communications, Inc., MM Docket No. 87-268, at 3 (filed Nov. 30, 1988); Comments of the Satellite Broadcasting and Communications Association, MM Docket No. 87-268, at 3 (filed Nov. 30, 1988); Comments of National Public Radio, MM Docket No. 87-268, at 5 (filed Nov. 30, 1988); Comments of the Land Mobile Communications Council, MM Docket No. 87-268, at 4-5 (filed Nov. 30, 1988).

[8] See Joint Comments of The Association of Maximum Service Telecasters, et al, MM Docket No. 87-268, at 21-22 (filed Nov. 30, 1988); Comments of Public Broadcasting Service and National Association of Public Television Stations, MM Docket No. 87-268, at 6 (filed Nov. 30, 1988); Comments of Westinghouse Broadcasting Company, Inc., MM Docket No. 87-268, at 5 (filed Nov. 30, 1988); Comments of National Broadcasting Company, Inc., MM Docket No. 87-268, at 9-13 (filed Nov. 30, 1988) [hereinafter, "NBC Comments"].

reallocated. WCA suspects, however, that the broadcast industry is eyeing for reallocation the very SHF spectrum on which wireless cable is dependent. That suspicion is based on the activities of Advanced Television Test Center ("ATTC") -- an organization controlled by broadcast interests. ATTC has applied to the Commission for special temporary authority to conduct experiments employing the ITFS band,[9] and many of the broadcasters commenting in response to the TD/FNOI have suggested that no decision on reallocation should be made until those tests are completed.[10]

WCA is categorically opposed to any reallocation of MDS, MMDS, ITFS or OFS spectrum to the broadcast industry for several fundamental reasons. The reallocation of spectrum is a serious matter; one that should not be undertaken unless absolutely necessary. Yet, the record establishes that

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[9] See Application of Advanced Television Test Center, Inc. for Special Temporary Authority to Construct and Operate an Experimental Transmission Facility in the 2.5 GHz Band, File No. BPEX-881006 (filed Oct. 6, 1988). George Mason University Foundation, Inc. ("GMUF") has requested that the Commission deny ATTC's 2.5 GHz application because it would cause interference to GMUF's ITFS operations. See Letter from Irving Gastfreund, counsel to GMUF, to Donna R. Searcy, File No. BPEX-881006 (filed Oct. 26, 1988). In addition, counsel to the wireless cable system operating in Washington has informally expressed similar concerns to ATTC, and is awaiting a response.

[10] See Comments of Corporation for Public Broadcasting and National Association of Public Television Stations, MM Docket No. 87-268, at 35 (filed Nov. 30, 1988) [hereinafter cited as "CPB/NAPTS Comments"]; Comments of Capital Cities/ABC, Inc., MM Docket No. 87-268, at 1-2 (filed Nov. 30, 1988); Comments of the National Association of Broadcasters, MM Docket No. 87-268, at 9 n.1 (filed Nov. 30, 1988); Comments of CBS Inc., MM Docket No. 87-268, at 16-17, 24-25.

broadcasters do not need additional spectrum outside the VHF and UHF bands in order to transmit ATV. Of particular note, several leading equipment manufacturers commenting on the TD/FNOI agreed with the Commission that it is unnecessary to allocate additional spectrum for broadcast transmission of ATV. For example, North American Philips Corporation advised the Commission "the spectrum necessary to permit current terrestrial broadcasters to provide HDTV services can be found within the existing VHF/UHF broadcast allocations."[11] Similarly, Zenith Electronics Corporation concluded that "[s]upplemental spectrum which may be needed in the implementation of ATV should be found in the present VHF and UHF broadcast television bands",[12] a view also shared by the Electronic Industries Association ATV Committee.[13]

The broadcasters, however, contend that additional spectrum above 1 GHz may be necessary in the largest markets. Even assuming for purposes of argument that broadcasters have a need for some additional spectrum in the major markets, there is insufficient vacant spectrum in the MDS, MMDS, ITFS and OFS bands in those markets to provide significant relief to the broadcast industry.

The experience of ATTC in coordinating its testing

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[11] Comments of North American Philips Corporation, MM Docket No. 87-268, at 11 (filed Nov. 30, 1988).

[12] Response of Zenith Electronics Corporation, MM Docket No. 87-268, at 2 (filed Nov. 30, 1988).

[13] See Comments of the Electronic Industries Association ATV Committee, MM Docket No. 87-268, at 13 (dated Nov. 28, 1988).

program is illustrative. As discussed, supra note 9, members of WCA have attempted to cooperate with ATTC to assure that any tests conducted by ATTC avoid interfering with the educators and wireless cable system that are fully exploiting the MDS, MMDS, ITFS and OFS channels in the Washington area. That task has been complicated by the fact that there is no vacant 2.5 GHz spectrum in the market. As Table I illustrates, in the Washington metropolitan area every single one of the thirty-three MDS, MMDS, ITFS and OFS channels is licensed or is the subject of mutually cut-off exclusive applications awaiting Commission consideration. In several cases, channels are being reused at multiple sites in the area. In order for ATTC to conduct its testing program, it must supplant existing educational and wireless cable operations during a portion of the day. That prospect that has resulted in friction between ATTC and the current users of the spectrum, who are entitled to absolute protection of their operations from interference.

The difficulties ATTC has faced in coordinating its testing program are symptomatic of the problem any major market broadcaster will face in securing spectrum in the MDS, MMDS, ITFS and OFS bands -- they are heavily utilized by educators and wireless cable system operators in the major markets. To cite another example, Table II illustrates that in the New York metropolitan area, every single one of these channels is currently being used, and often reused, by twenty-seven different stations, with applications pending for another three new

stations. Eight of the operating stations are currently utilized by the area's wireless cable system (the largest in the country), while two of the applicants with pending proposals have also agreed to lease time to the wireless cable operator.

The usage of the SHF bands in the New York and Washington markets is typical of that in the major markets around the country. Indeed, the MDS, MMDS, ITFS and OFS bands are so heavily utilized that the Spectrum Utilization and Alternatives Working Party of the Planning Subcommittee of the Advisory Committee on Advanced Television Service ("Working Party 3") concluded that "[i]n the major markets, no channels are currently available for sharing without displacement of authorized facilities."[14]

WCA is troubled that not one of the broadcast interests urging the reallocation of spectrum above 1 GHz have even addressed the fact that the SHF channels employed by wireless cable operators are in great demand. That failure is particularly surprising given the findings of Working Party 3 and that the TD/FNOI cites frequency congestion in the bands above 1 GHz as a major reason for limiting the broadcast industry to the present VHF and UHF allocations for ATV transmissions.[15] Indeed, the failure of the broadcasters to address current congestion in

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[14] Report of the Spectrum Utilization and Alternatives Working Party (Working Party 3) of the Planning Subcommittee of the Advisory Committee on Advanced Television Service, at 31 (dated 4/17/88)(emphasis added).

[15] See TD/FNOI, supra note 1, at ¶ 76.

the bands above 1 GHz implies that they would have the Commission banish the current users of any reallocated spectrum to other bands.

Such an approach would be intolerable to the educators and wireless cable systems which are currently using the MDS, MMDS, ITFS and OFS in the major markets. Eight years ago, the Commission concluded that there was no available spectrum other than 2.5 GHz to meet their point-to-multipoint video distribution needs.[16] That finding still holds true today -- there simply is no suitable spectrum to which MDS, MMDS, ITFS and OFS users can migrate. Moreover, even assuming that spectrum was available, forced relocation to some other portion of the electromagnetic spectrum would impose devastating economic and operational hardships on the educators and wireless cable systems that today depend on the SHF band for their transmission capability. It simply is not a viable option.

For these reason, WCA urges the Commission to make final its decision not to reallocate for broadcast transmission of ATV spectrum currently allocated to the MDS, MMDS, ITFS and OFS.

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[16] See Amendment of Parts 2, 21, 74 and 94 of the Commission's Rules and Regulations in Regard to Frequency Allocation to the Instructional Television Fixed Service, the Multipoint Distribution Service, and the Private Operational Fixed Microwave Service, 45 Fed. Reg. 29,323, 29,329 (1980).

B. In Reallocating Point-to-Point Spectrum For ATV, the Needs of the Wireless Cable Industry Should Be Addressed.

In the TD/FNOI, the Commission has sought comment "on the adequacy of the existing allocated bands used to deliver television signals and the ability of current delivery mechanisms to handle ATV systems."[17] Both the broadcast and cable industry have responded with comments seeking additional spectrum to meet their point-to-point signal delivery needs.

Even now, the wireless cable industry suffers from a shortage of suitable point-to-point spectrum for use in relaying signals from earth stations to transmission headends where the facilities cannot be co-located. Unlike both the broadcast and cable industries, wireless cable does not have any spectrum set aside for this purpose. As a result, wireless cable is limited to highly congested private radio bands generally open to other users. Compounding the problem, wireless cable operators are relegated under Part 94 to using only the congested 6425-6525 MHz band or expensive frequencies above 21 GHz[18] and can only be licensed to transmit over four channels from any given location.[19] As a result, wireless cable operators must expend more than their competitors for signal delivery when point-to-point spectrum is available, and are increasingly forced to seek

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[17] TD/FNOI, supra note 1, at ¶ 97.

[18] See 47 C.F.R. § 94.9 (1987).

[19] 47 C.F.R. § 94.15 (1987).

out alternatives other than owning their own point-to-point capabilities -- alternatives that are always more expensive and less flexible.

The problems facing the wireless cable industry in relaying programming from remote sites to headends will only be exacerbated by the introduction of ATV. Yet, as National Broadcasting Company ("NBC") correctly notes, "[t]he importance of maintaining adequate auxiliary spectrum for ATV cannot be stressed enough, for without it there can be no ATV transmissions."[20] Therefore, WCA concurs with NBC's suggestion that a new band be reserved exclusively for ATV auxiliary use,[21] and urges the Commission to afford wireless cable operators, as well as coaxial cable operators and broadcasters, access to that band.

III. CONCLUSION

WCA applauds the Commission's efforts to date in addressing the myriad technical and policy issues raised by the impending introduction of ATV. While WCA certainly believes that the broadcast industry should be permitted to transmit ATV signals, WCA urges the Commission to make clear once and for all that the SHF spectrum on which wireless cable is dependent is off limits to the broadcast industry. In addition, in addressing the needs of the broadcast and cable industries for point-to-point auxiliary spectrum, the Commission should assure that adequate

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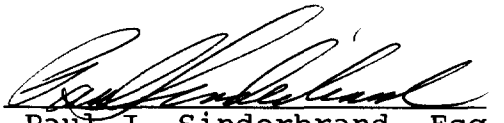
[20] NBC Comments, at 14.

[21] See id., at 17.

point-to-point is available to meet the wireless cable industry's ATV needs.

Respectfully submitted,

THE WIRELESS CABLE ASSOCIATION, INC.

By: 

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Its Attorneys

January 23, 1989

TABLE I

Stations Within 35 Miles of the Capitol Building

Channels	Call Sign	Licensee
MDS1	WOI-93 (Bethesda, MD)	Microband Wireless Cable of Washington, Inc.
MDS2	WHT-747 (Bethesda, MD)	Washington MDS Company
MDS1	Pending (Towson, MD)	Feasel, Gay & DeStefano
MDS1	Pending (Catonsville, MD)	Microband Corporation of America
MDS2	WHT-571 (Towson, MD)	Microband Corporation of America
A1-A2	Pending (Fairfax, VA)	Northern Virginia Community College
A3-A4	Pending (Alexandria, VA)	Northern Virginia Community College
A1-A4	WDT-881 (Wheaton, MD)	University of Maryland-College Park
B1-B4	Pending (Rosslyn, VA)	Greater Washington Educational Telecommunications Ass'n
B1-B4	WHR-807 (Baltimore, MD)	University of Maryland-Baltimore
C1-C4	WHB-652 (Arlington, VA)	George Mason University Foundation
C2	KA88815 (temporary fixed)	George Mason University Foundation
C1-C4	Pending (Baltimore, MD)	University of Maryland-Baltimore
C1-C4	Pending (Baltimore, MD)	Instructional Telecommunications Foundation
D1-D4	WHG-442 (Washington, DC)	George Washington University
E1-E4	Pending (Baltimore, MD)	Feasel, Gay & DeStefano
E1-E4	WHG-443 (Washington, DC)	George Washington University
E1-E4	Pending (Washington, DC)	MTD Enterprises, Inc.
E1-E4	WHQ-379 (Gaithersburg, MD)	University of Maryland-College Park
E1-E4	WDT-880 (College Park, MD)	University of Maryland-College Park
E1-E4	WHQ-240 (Fort Meade, MD)	University of Maryland-College Park
E1-E4	WHB-851 (Fairfax, VA)	University of Maryland-College Park
F1	KA88816 (temporary fixed)	George Mason University Foundation
F1-F4	WHB-836 (Rosslyn, VA)	George Mason University Foundation
F1-F4	Pending (Washington, DC)	Contemporary Communications Corporation
F1-F4	Pending (Baltimore, MD)	Multi-Micro
G1-G2	WHG-349 (Merrifield, VA)	Central Virginia Educational Television Corporation
G3-G4	WHR-687 (Reston, VA)	Central Virginia Educational Television Corporation
G1-G4	WHR-641 (Washington, DC)	Network for Instructional TV
G1-G4	Pending (Catonsville, MD)	Catonsville Community College
G1-G4	Pending (Catonsville, MD)	University of Maryland
H1	WNEK-883 (Baltimore, MD)	Contemporary Communications Corporation
H2	WNEK-840 (Bethesda, MD)	MultiChannel Media, Inc.
H3	WHJ-920 (Washington, DC)	Reuters Limited

TABLE II

Stations Within 35 Miles of Empire State Building

Channels	Call Sign	Licensee
MDS1	WQQ-79 (New York, NY)	Microband Corporation of America
MDS2	WLK-227 (New York, NY)	New York MDS Company
A1-A4	KRS-81 (New York, NY)	Roman Catholic Archdiocese of New York
A1-A4	KRS-84 (New York, NY)	Roman Catholic Archdiocese of New York
A1-A4	KNZ-67 (Syosset, NY)	Roman Catholic Diocese of Rockville Centre
A1-A3	KHD-21 (Franklin Square, NY)	Sewanhaka Central High School District
B1-B2	KHC-94 (Plainview, NY)	Plainview-Old Bethpage School District
B1-B4	KNZ-69 (New York, NY)	Roman Catholic Diocese of Brooklyn
B2	WHR-691 (New York, NY)	Roman Catholic Diocese of Brooklyn
B1-B4	KZE-20 (New York, NY)	Roman Catholic Diocese of Brooklyn
B1, B3-B4	Pending (New York, NY)	Health Research & Educational Trust of New Jersey
C1	WGM-95 (New York, NY)	Board of Education of Union Township
C2-C3	WHR-829 (New York, NY)	Hispanic Information & Telecommunications Network
C4	WHR-828 (New York, NY)	Educational Broadcasting Corporation
D1-D2	KNU-43 (Westbury, NY)	Board of Cooperative Educational Services
D1-D4	WHR-520 (New York, NY)	Network for Instructional TV
D2-D4	WHR-872 (Piscataway, NJ)	Rutgers, the State University of New Jersey
E1-E4	KRS-82 (New York, NY)	Roman Catholic Archdiocese of New York
E1-E4	KRS-83 (Yonkers, NY)	Roman Catholic Archdiocese of New York
E1-E4	KNZ-65 (Uniondale, NY)	Roman Catholic Diocese of Rockville Centre
E1-E4	Pending (New York, NY)	Red New York E Partnership
F1-F4	KNZ-70 (New York, NY)	Roman Catholic Diocese of Brooklyn
F1-F4	KVS-31 (New York, NY)	Roman Catholic Diocese of Brooklyn
F1-F4	Pending (New York, NY)	Grand MMDS Alliance New York F/P Partnership
G1-G4	WHR-821 (Montclair, NJ)	New Jersey Public Broadcasting Authority
G1-G4	WHR-822 (Warrenville, NJ)	New Jersey Public Broadcasting Authority
G1-G4	KNZ-71 (New York, NY)	Mineola Union Free School District
H1	WNEL-497 (New York, NY)	Group W Radio
H2	WHJ-897 (New York, NY)	Reuters Limited
H3	WCX-57 (New York, NY)	United Airlines

CERTIFICATE OF SERVICE

B.

I, Flo Brizer, hereby certify that copies of the foregoing Reply Comments of the Wireless Cable Association, Inc. were served this 23rd day of January, 1989 by first class United States mail, postage prepaid, upon the parties identified on the attached service list.

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